

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

FEB 2 0 2014

Bill Washburn Helena Chemical Company 225 Schilling Boulevard, Suite 200 Collierville, TN 38017

Subject: Updating label to match cited product (100% repack)

Product name: Helena OUTLAW

EPA Reg. No: 5905-574

Application Dated: April 16, 2013

Dear Mr. Washburn,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of the label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipping after eighteen (18) months must bear the new revised label.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Grant Rowland at 703-347-0254 or at Rowland.Grant@epa.gov.

1/NHA.

Kathryn Montague Product Manager 23

Herbicide Branch

Registration Division (7505P)

ACCEPTED

FEB 20 2014







For control of a witde-spectrum of annual, biennial, and perennial broadleaf weeds and brush in Pastures, Rangeland, and Grass (Hay, Silage); Wheat; Conservation Reserve Program land; Certain Non-Crop Areas, Forest Management; General Farmstead Areas; Post-Harvest, Fallow, Crop Stubble and Set Aside Acres

ACTIVE INGREDIENT(S):

OTHER INGREDIENTS:63.54%

Equivalent to:

12.18% Dicamba Acid, 1.09 lbs./gal 16.10% 2,4-D Acid or 1.45 lbs./gal Isomer specific by AOAC Method 6.D01-5 (12th Ed.)

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.).

FIRST AID
Hold eye open and rinse slowly and gently with water for 15-20 minutes.
Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice
Call a poison control center or doctor immediately for treatment advice
Have a person sip a glass of water if able to swallow.
Do not induce vomiting unless told to do so by a poison control center or doctor
Do not give anything by mouth to an unconscious or convulsing person
Take off contaminated clothing
Rinse skin immediately with plenty of water for 15-20 minutes
Call a poison control center or doctor for further treatment advice
HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE

EPA REG. NO. 5905-574 EPA EST. NO. 42750-MO-1

NET CONTENTS: AD 081910

MANUFACTURED FOR **HELENA CHEMICAL COMPANY** 225 SCHILLING BOULEVARD, SUITE 300 **COLLIERVILLE, TN 38017**

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are butyl rubber, natural rubber, neoprene or nitrile rubber. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

Long-sleeved shirt and long pants.

Shoes and socks.

Chemical resistant gloves (except for applicators using ground boom equipment, pilots and flaggers) when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

Chemical resistant apron when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

Protective eyewear (goggles or face shield)

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be re-used until it has been cleaned.

ENGINEERING CONTROL STATEMENTS

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)]

When handlers use enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- 1. Users should Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 2. Users should remove clothing/PPE immediately if pesticide gets inside. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- 3. Users should remove PPE immediately after handling this product. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on label.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Endangered Species Concerns:

The use of any pesticide in a manner that may kill or otherwise harm and endangered species or adversely modify their habitat is a violation of federal law.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Unless otherwise directed in supplemented labeling, all applicable directions, restrictions, precautions and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in <u>Washington Toxics Coalition</u>, et al. v. <u>EPA</u>, C01-0132C, (W.D. WA). For further information, please refer to EPA Web Site: http://www.epa.gov/espp.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over short-sleeve shirt and short pants
- Chemical resistant footwear plus socks.
- Chemical resistant gloves made of any waterproof material.
- Chemical resistant headgear for overhead exposure
- Protective Eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

USE REQUIREMENTS FOR PASTURES, PERENNIAL GRASSLANDS, RANGELAND, FALLOW LAND AND NONCROP AREAS: Do not enter treated areas until spray has dried. For early entry to treated areas, wear eye protection, chemical-resistant gloves made of any waterproof material, long-sleeved shirt, long pants, shoes and socks.

TURF USE REQUIREMENTS: Do not allow persons or pets on treated area during application. Do not enter treated areas until spray has dried. NOTE: For application to turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes, follow AGRICULTURAL USE REQUIREMENTS on this label.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions that might adversely affect the container or its ability to function properly.

PESTICIDE STORAGE: Do not store below temperature of 32°F or above 100°F. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(non-refillable <5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable container (250 gallon & bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

In Case of Spill: In case of large-scale spillage regarding this product, call ChemTrec 800-424-9300.

Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

I. PRODUCT INFORMATION

Helena OUTLAW™ herbicide is a postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush-in pastures, rangeland, and grass (hay, silage); wheat; conservation reserve program land; postharvest, fallow, crop stubble, set-aside acres; general farmstead areas; and certain noncrop areas.

Mode of Action

Helena $OUTLAW^{TM}$ contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions. Helena $OUTLAW^{TM}$ is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. Helena $OUTLAW^{TM}$ interferes with the plant's growth hormones (auxins) resulting in death of many broadlear weeds.

For best results, thoroughly clean sprayer equipment (tank, lines and nozzles) immediately after use by flushing system with water and heavy duty detergent or other suitable tank cleaner.

II. APPLICATION INSTRUCTIONS

Apply Helena OUTLAW™ at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by section on "Food/Feed Crop Specific Information" or "Non-Food/Feed Use (Land not Harvested, Grazed or Foraged)-Specific Information." Helena OUTLAW™ may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence use for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hayland, or wheat crops only. The most effective application rate and timing varies based on the target weed species (refer to Table I). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size and will prevent adequate control. For certain specified applications liquid fertilizer or oil may replace part or all of the water as diluent. If dry flowable (DF), wettable powder (WP) or flowable (F) tank mix products are to be used, these should generally be added to the spray tank first. Refer to the mixing directions on the labels of the tank mix products.

Irrigation: In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

Spray Coverage:

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and prevent adequate spray coverage.

Sensitive Crop Precautions:

Helena OUTLAW[™] may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. At high temperatures (about 85 degrees or higher), vapors from this product may cause injury to the aforementioned susceptible crops. These plants are most sensitive to Helena OUTLAW[™] during their development or growing stage. Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of Helena OUTLAW[™] with the roots of desirable trees and shrubs.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors ontarget deposition and are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

2,4-D esters may volatize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial equipment and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For aerial equipment, the boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made in a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

For ground boom application, do not apply with a nozzle height greater than 4 feet above the crop canopy.

Table 1. Application Rate and Timing - Annual Weeds

(Applicators must follow maximum application rates in the Use Specific Information sections of the label)

(For use in non-food/feed crops only: the addition of liquid fertilizer (28-0-0,32-0-0) solutions at $\frac{1}{2}$ the GPA spray solution has shown to give increased efficacy.)

Weeds Controlled		Ra	te Per Acre (ac	cording to weed gro	wth stage)	
(including ALS – and triazine-resistant)	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5 pints
Beebalm, Spotted	-	-	-	pre-bloom	post-bloom	_
Broomweed	1-3"	3" branching	-	branching	-	after branching
Buckwheat, Wild	-	1-6"	-		-	-
Buffalobur	-	-		1-6"	-	Flowering
Burdock	_	pre-flower	-	-	-	
Buttercup		pre-flower	-	early bloom	late bloom	-
Chickweed, Common	_	Seedling	1-3"	-	-	
Cockle, Cow		< 3"	-	-	-	-
Cocklebur, Common	-	1-6"	6-12"	12-18"	-	-
Coreopsis, Plains	1-4"	1-6"	-	-	-	-
Croton, Woolly	-	4-12"	12-30"	-	-	-
Dogfennel	-	-	-	10-15"	-	-
Evening Primrose	-	< 2"	-	2-6"	-	-
Flax .	-	< 2"	_	-	-	-
Fleabane, Annual	-	1-4"	4-8"	8"	-	
Fixweed	-	< 3"	-	-	-	
Henbit	-	-	preflower	-	flower	-
Horseweed/Marestail	-	-	Pre-bolt	-	Post-bolt: Up to 4"	
Knotweed Spp.	-	< 3" runners	-	> 3" runners	-	actively growing
Kochia	-	1-6"	6-10"	10-20"	-	actively growing
Lambsquarters, Common	-	1-6"	6-10"	10-20"	-	actively growing
Mallow, Common		< 3"		-	_	-
Morning glory, Ivyleaf		pre-flower	-	-	-	
, Tall	-	pre-flower	-	post-flower	-	-
Mustards, Annual		Rosette		early bolt		
, Tansy	-	< 3"		• • • • • • • • • • • • • • • • • • • •	-	
Pennycress, Field	-	_	-	rosette	-	
Pepperweed, Virginia	-	-	1-3"	3-6"	after branching	-

Weeds Controlled		R	ate Per Acre (acc	cording to weed grow	th stage)	
(including ALS – and triazine-resistant)	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5 pints
Pigweed, Prostrate	-	< 3"	-	-	-	-
, Redroot	-	< 3"	3-10"		-	-
, Smooth	-	< 3"	-	-	-	-
, Tumble	-	< 3"	-	mature	-	-
Poorjoe	-	prior to flower	-	- '	-	actively growing
Pursiane, Common		< 3"	3-8"		-	-
Ragweed, Common				>10"	-	
Western, Lanceleaf	1-3"	3-6"	6-10"	actively growing	-	-
Sedge ¹		-	-	-	-	_
Shepherdspurse	-	Rosette	-	-	-	-
Smartweed, Pennsylvania	-	< 4"	-		4-12"	<u>-</u>
Sneezeweed, Bitter	-	1-4"	prior to flower	flower	-	-
Sowthistle	-	Rosette	-	bolting	-	-
Sunflower	-	1-3"	3-6"	6-24"	-	-
Thistle, Russian	-	-	-	rosette	-	-
Velvetleaf	-	< 6"	6-20"	> 20"	-	-

¹ For use in non-food/feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

Table 2. Application Rate and Timing – Biennial and Perennial Weeds.

(Applicators must follow maximum application rates in the Use Specific Information sections of the label)

(The addition of liquid fertilizer (28-0-0,32-0-0) at $\frac{1}{2}$ the GPA of the spray solution has proven to give increase suppression or control on certain species of weeds.)

		owth stage)				
Weeds Controlled	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5-5.25 pints
Bindweed, Field		-	-	-	-	actively growing
Bittercress	-	2-3"	-	-	-	-
Buckeye species ¹	-	_	-	-	full leaf	-
Bullnettle ²	-	-	-	flower	-	-
Chircory	-	-	-	-	early bolting	-
Clove, Bur	-	-	Pre-flower	_	-	-
Dandelion, Common	-	rosette	-	bolting	-	-
Dewberry, Southern ¹		-	-	_	-	spring or fall
Dock, Curly	-	-	prior to bolting	-	after bolting	-
Elderberry ²	-	-		-	-	actively growing
Goldenrod, Missouri	-	-		3-15"	flower	
Groundsel, Texas	-	rosette	post-bolting	-	-	-
Honeysuckle, Hairy	-	-	-	-	spring or fall	-
Horsenettle, Carolina ¹	-	-	_	-	_	flower or berry
Ivy, Poison			-	after bloom	-	-
Knapweed, Black ²	-	-	-	_	-	actively growing
, Russian ²	-	-	_	_		actively growing
, Spotted	-	-	-		-	actively growing

		Rate I	Per Acre (acco	rding to weed gro	owth stage)	
Weeds Controlled	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5-5.25 pints
Marshelder	-		-	<12"	12"/prebloo	
					m	
Mesquite ³		- 1	-	-	-	45-90 days
}						after budbreak
Milkweed, Antelopehorn ²		-	-	pre-flower	-	Flower
Nightshade, Silverleaf ¹	-	-	-	full flower	-	
,Black ¹	-	-	-	full flower	-	actively growing
Persimmon, Eastern ³	-	-	-	-	-	actively growing
Prickly, Lettuce	-	_	-	rosette	-	actively growing
Rabbitbrush ²	-	-	-	-	_	
Ragwort, Tansy •	-	-	-	rosette	-	actively growing
Redvine ²	-	-	-	-	-	actively growing
Sagebrush, Fringed ²		-	_	-	-	actively growing
Smartweed	-	-	-	-	-	
Sorrel, Red	-	- .	Rosette	bolting	flower	actively growing
Sowthistle ²	_	-	-	-	-	actively growing
Spurge, Leafy ²		-	-	-	-	full leaf
Tallow Tree, Chinese⁴	-	-	-	-	-	-
Thistle, Bull	-		Rosette	bolting	-	actively growing
, Canada ²	-	-	-	-	-	-
, Musk	-	-	-	rosette/boltin	-	-
,				g		
, Plumeless	_	-	Rosette	bolting		
Vetch, Hairy	-	1-4"	4-8"	8" full flower		
Yankeeweed	-	_	-	10-18"	-	Rosette
Yellow Starthistle ¹	-	-	-	_	-	

¹ May require repeat applications

For increased control of weeds such as blackberry and dewberry, Helena OUTLAW™ may be tank mixed with Ally® herbicide (0.1-0.2 ounces per acre), if labeled for the use site.

Ground Application (Banding)

When applying Helena OUTLAW™ herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

Bandwidth in inches x Broadcast rate = Banding herbicide Row width in inches per acre rate per acre

Bandwidth in inches x Broadcast rate = Banding water Row width in inches volume per acre volume per acre

Ground Application (Broadcast)

Water volume: Use 10-25 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

² Specified rate will provide top growth suppression only.

³ For improved root kill or woody species such as mesquite and eastern persimmon spray 3.5 pints per acre of Helena OUTLAW[™] each year for 3 consecutive years.

⁴ Under dense populations, a second application may be needed the following growing season.

Application Equipment: Select nozzle design to produce minimal amounts of fine spray particles. Spray nozzles as close to the weeds as is practical for good weed coverage.

Spot or Small Area-Application- --- •

Helena OUTLAWTM may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of Helena OUTLAWTM in water according to Table 3 (assuming that, the spot treatment rate equates to 40 gallons pre acre on the broadcast basis.) Adding a surfactant (0.5% by volume) can help improve control.

Do not make spot treatments in addition to broadcast or band treatments.

Application equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

Table 3. – Knapsack Sprayer Dilution Instructions

Sprayer Capacity	Amount of Helena OUTLAW™
(gallons of water)	to add to the spray tank
1 gallon	1 fluid ounce*
3 gallons	3 fluid ounces
5 gallons	5 fluid ounces

^{* 1} fluid ounce = 2 tablespoons

III. ADDITIVES

To improve burndown of emerged weeds, surfactants and/or low use rates of liquid fertilizers (28-0-0; 32-0-0), or crop oil concentrate may be used with Helena OUTLAW™ herbicide or Helena OUTLAW™ tank mixes applied after the weeds have emerged. Crop oil concentrate is for non-food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate to any food/feed crop use listed on this label. For food/feed crop use, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances.

Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be non-phytotoxic
- contain only EPA-exempt ingredients
- provide good mixing quality in the jar test, and
- be successful in local experience

The exact composition of suitable products will vary; however, vegetable oil and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components.

Adjuvants containing crop oil concentrates may be used for preplant, pre-emergence and between cropping applications. Do not use crop oil concentrate for postemergence applications in food/feed crops (i.e. grass (hay or silage), pastures, rangeland, and wheat.)

Nitrogen Source

Sprayable liquid fertilizers: Do not use brass or aluminum nozzles when spraying liquid (28-0-0; 32-0-0) fertilizers.

Non-ionic Surfactant

The standard label rate is 2-4 pints of an 80% active non-ionic spray surfactant per 100 gallons of water. (Rate will vary with the size and condition of weeds to be controlled. Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.)

Table 4. Additive Rate Per Acre.

Additive ¹	Rate Additive Per Acre
Non-ionic Surfactant	2-4 pints per 100 gallons ²
Sprayable Liquid Fertilizers (28-0-0; 32-0-0)	1/2 GPA of spray solution
Crop Oil Concentrate	1 quart

See manufacturer's label for specific rate recommendations.

IV. PRODUCT TANK MIXING INFORMATION

Tank Mix Partners/Components

The following products may be tank mixed with Helena OUTLAW™ according to the specific tank mixing instructions in this label and respective product labels.

Aim™ (carfentrazone-ethyl) Ally® (metsulfuron-methyl) Amber® (triasulfuron) Asulox® (asulam)

Atrazine

Banvel® (dicamba) Basagran® (bentazon)

Bronate® (bromoxynil + MCPA)

Buctril® (bromoxynil)

Canvas® (thifensulfuron-methyl + tribenuron-methyl+metsulfuron-methyl)

Clarity® (dicamba)

Curtail[™] (clopyralid + 2,4-D)

Cyclone® (paraquat)

Dakota® (fenoxaprop-p-ethyl + MCPA)

Dicamba DMA (dicamba)

Distinct® (diflufenzopyr + dicamba)

Evik® (ametryn)

Express® (tribenuron-methyl)

Fallowmaster® (glyphosate + dicamba) Fallow Star™ (glyphosate + dicamba)

Finesse® (chlorsulfuron + metsulfuron-methyl)

Glean® (chlorsulfuron)

Gly Star[™] Plus (glyphosate) Gramoxone® Extra (paraquat)

Grazon™ P+D (picloram + 2,4-D)

Harmony® Extra (thifensulfuron-methyl +

tribenuron-methyl) Karmex® (diuron) Kerb [™] (pronamide)

Laddok® S-12 (bentazon + atrazine)

Landmaster® (glyphosate + 2,4-D)

MCPA

Paramount® (quinclorac) Peak® (prosulfuron)

Permit® (halosulfuron-methyl) Rave[™] (dicamba + triasulfuron)

Roundup® Ultra (glyphosate) Sencor® (metribuzin)

Sinbar® (terbacil) Stinger [™] (clopyralid)

Tiller® (fenoxaprop-p-ethyl + 2,4-D + MCPA)

Tordon [™] (picloram)

Touchdown® (glyphosate)

 $2,4-D^{1}$

² Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.

(1) Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed the combined total of pounds of a.e. per acre per crop cycle of 2,4-D for the use site being applied to.

See "VI.Food/Feed Crop Specific Information" section for more information for more details. Read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes. Physical incompatibility, reduced weed control, or crop injury may result from mixing Helena OUTLAW** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of the label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is still incompatible, do not mix the ingredients in the same tank.

Mixing Order

If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

- 1. Water Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2. Agitation. Maintain constant agitation throughout mixing and application.
- 3. Products in PVA bags. Place any product contained in water-soluble bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4. Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, and suspo-emulsions)
- 5. Water-soluble products (such as Helena OUTLAW[™]).
- 6. Emulsifiable concentrates (such as oil concentrate, when applicable).
- 7. Water-soluble additives (such as liquid fertilizers (28-0-0; 32-0-0), when applicable),*
- 8. Remaining quantity of water.
- * If sprayable fluid fertilizer is used as the carrier.

Always perform the Compatibility Test before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

V. RESTRICTIONS AND LIMITATIONS

- Maximum seasonal use rate: Refer to Table 5.
- Preharvest Interval (PHI): Refer to "Food/Feed Crop Specific Information"
- Restricted entry Interval (REI): 48 Hours

- Crop Rotational Restrictions:
- The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil.

CROP	1	DAYS PLANT BAC /2" rainfall or irri			DAYS PLANT BACK	· -· · · - · · · · · · · · · · · · · ·
CINO	(/11/03/	application)*		(Areas < ½" rainfall or irrigation after application)		
	1 - 3 pints/A	3 - 6 pints/A	> 6 - 8	1 – 3 pints/A	> 3 - 6 pints/A	> 6 - 8
			pints/A			pints/A
Corn	14	21	120	30	60	120
Cotton	21	45	120	30	90	120
Barley, Oats, Wheat and other small grains	14	21	120	21	60	120
Sorghum	14	21	120	30	60	120
Soybean	30	45	120	45	90	120
All other	120	120	DO NOT ROTATE	120	120	DO NOT
crops			KUTATE	<u> </u>		ROTATE

*NOTE: A cumulative 1/2 inches of rainfall or irrigation must occur in 2 or less rainfalls and/or irrigations before calculating plantback interval.

- Arid (dry) conditions: it is extremely important that the addition of a suitable Nonionic Surfactant, Oil, or sprayable fertilizer be used when applying Helena OUTLAW™. Higher rates of Helena OUTLAW™ may be needed to control susceptible weeds in this environment.
- Rainfast Period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce effectiveness of Helena OUTLAW™.
- Stress: Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- Do not apply this product though any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.
- This product cannot be used to formulate or reformulate another pesticide product.

Table 5. Crop Specific Restrictions and Limitations.

Crop	Maximum Rate	Maximum Rate	Livestock Grazing or	Aircraft Application
	Per Acre	Per Acre	Feeding ¹	
	Per Application	Per Season		
Between Crop	6 pints	8 pints	Yes	Yes
Applications	·	•		
Pasture, Hay, Silage	4 pints	8 pints	Yes	Yes
Wheat	2 pints	3.33 pints	Yes	Yes

16/ /27

VI. FOOD/FEED CROP SPECIFIC INFORMATION

Helena OUTLAW™ is to be used for use for pasture (including pasture grown for hay), rangeland, grass grown for hay or silage, between crop applications/fallow systems, Conservation Reserve Programs, and general farmstead (non-cropland only).

Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Uses described in this section also pertain to small grains (such as barley, corn, forage sorghum, oats, rye, sudangrass, or wheat) grown for pasture, hay, and silage only. Newly seeded areas including small grains grown for pasture or hay, may be injured if rates of Helena OUTLAW $^{\text{TM}}$ are greater than 2 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (*Cynodon* spp.) use 1.75 to 3.5 pints of Helena OUTLAWTM per acre to control or suppress weeds after planting vegetative propagules (stolens) of hybrid bermudagrasses. In addition to the weeds listed in Tables 1 and 2, this rate of Helena OUTLAWTM will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if Helena OUTLAWTM is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7-10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1" in height before application or if germination of weeds occurs 10 days after application.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lespedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur.

When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds may require a repeat application.

For pasture renovations, wait 3 weeks per quart (2 pints) of Helena OUTLAW™ used per acre before interseeding or injury may occur.

If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches joint stage.

Grazing and Feeding Non-Lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals. Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.

Grazing and Feeding Lactating Animals: Do not graze lactating dairy animals within 7 days of treatment.

Dry hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 37 days of treatment.

Pasture and Rangeland Tank Mixes

Helena OUTLAW™ may be applied in tank mixes with one or more of the following herbicides:

Ally®

Banvel®

Dicamba DMA

2.4-D

Amber®

Clarity®

Rave™

PASTURE & RANGELAND RESTRICTIONS:

- Do not apply more than 4 pints per acre per application.
- Rates above 4 pints of Helena Outlaw per acre are for spot treatments only

- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- If grass is to be cut for hay, Agricultural Use requirements for the Worker Protection Standard are applicable.
- For spot treatment do not apply more than 11 pints per acre per application
- Maximum of 22 pints per acre per year
- Do not cut forage for hay within 7 days of application
- For program lands, such as Conservation Reserve Program, consult programs rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

WHEAT (Fall and Spring-seeded)

If small grains are grown for pasture or hay only, refer to Pastures, Rangeland and Grass (Hay, Silage).

Do not graze or harvest for livestock feed prior to crop maturity.

Do not use Helena OUTLAW™ in wheat underseeded with legumes.

EARLY SEASON POST EMERGENCE APPLICATION (Fall and Spring Seeded):

Apply 1.5 pints of Helena OUTLAW™ per acre to wheat unless using one of the wheat specific programs below.

Early season applications to spring-seeded wheat must be made after tillering and before wheat reaches the 6-leaf stage.

Early season applications to fall-seeded wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing wheat varieties such as TAM 107, Madison, or Wakefield to be certain that the application occurs prior to the jointing stage.

SPECIFIC USE PROGRAMS FOR FALL-SEEDED WHEAT ONLY:

Up to 1.33 pints of Helena OUTLAW™ per acre may be applied post emergent on fall-seeded wheat after the wheat begins to tiller for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

PREHARVEST APPLICATIONS:

Helena OUTLAW™ can be used to control weeds that may interfere with harvest of wheat. Apply up to 2 pints of Helena OUTLAW™ per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

For control of additional broadleaf weeds or grasses, Helena OUTLAW™ may be tank mixed with other herbicides such as Ally or Gly Star™ Plus that are registered for preharvest use in wheat.

Preharvest use of Helena OUTLAW™ is not registered for use in California.

Table 6 - Wheat Tank Mixes

TANK MIX PARTNER	RATE PER ACRE		
• Aim [™]	0.3 ounce		
' Ally ^{®1}	0.05-0.1 ounce		
• Amber®1	0.14-0.28 ounce		
• Bronate®	0.75-1.5 pints		
Buctril®	1-1.5 pints		
• Canvas ^{®1}	0.2-0.4 ounce		
• Curtail [™]	2-2.67 pints		
Dakota ^{®2}	16 fluid ounces		
Express ^{®1}	0.083-0.167 ounce		
Finesse ^{®1}	0.167-0.33 ounce		
Glean ^{®1}	0.167 ounce		
Harmony® Extra ¹	0.167-0.33 ounce		
Karmex ^{®3}	0.5-1.5 pounds		
2, 4-D amine	SEE FOOTNOTE 4		
Metribuzin³ (Sencor®)	0.25-0.375 pounds a.i.		
Peak ^{®1}	0.25-0.38 ounce		
Stinger™	4-5.33 fluid ounces		
Tiller®2	1-1.7 pints		

¹ Do not use low rates of sulfonylurea herbicide, such as Ally®, Amber®, Canvas®, Express®, Finesse®, Glean®, Harmony® Extra, and Peak® on more mature weeds or on dense vegetative growth.

Between Crop Applications/Fallow Systems, Conservation Reserve Programs, and General Farmstead These uses are considered Food/Feed Crops when harvested, grazed or foraged. Consult section on "Product Tank Mixing Information" for adjuvant restrictions and section on "Additives" for specific use directions.

WHEAT RESTRICTIONS:

- Postemergence:
 - Make no more than one application per crop cycle.
 - Do not apply more than 1 1/3 pints per acre per application.
- Preharvest
 - Make no more than one application per crop cycle.
 - Do not apply more than 1 1/3 pints per acre per application.
 - Pre-Harvest interval is 14 days.
- ⁴ Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not:
- Exceed a combined total of 1.25 pounds of a.e. per acre per crop cycle of 2,4-D for post emergent use.
- Exceed 0.5 pounds of a.e. per acre per crop cycle of 2.4-D for pre-harvest application.
- Exceed a total of 1.75 pounds of a.e. per acre per crop cycle for all uses.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

² Do not use as a tank mix treatment with Dakota or Tiller on Durum wheat. Do not tank mix with Tiller if wild oat is the larger weed.

³ Tank mixes with Karmex and metribuzin are for use in fall-seeded wheat only.

VII. NON-FOOD/FEED USE (Land not Harvested, Grazed or Foraged) - Specific Information.

BETWEEN CROP APPLICATIONS

PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE) FOR BROADLEAF WEED CONTROL

Helena OUTLAW™ can be applied postharvest in the fa|l, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply to weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer. To aid in suppressing certain perennial or biennial broadleaf weeds (including cotton regrowth), this product may be applied either alone or in combination with other registered herbicides.

See "V. Restrictions and Limitations" for the specific interval between application and planting to prevent crop injury.

Rates and Timings:

Apply 1.5 - 6 pints of Helena OUTLAW™ per acre. Refer to Table 1 to determine use rates for specific targeted weed species. For best performance, apply Helena OUTLAW™ when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if Helena OUTLAW™ is applied when the majority of weeds have at least 4-6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage. The addition of liquid fertilizers (28-0-0, 32-0-0) at ½ GPA has shown to increase efficacy.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for Helena OUTLAW $^{\text{TM}}$. For seedling control, a follow-up program or other cultural practices could be instituted.

Between Crop Tank Mixes:

In tank mixes with one or more of the following herbicides, apply 1.5 - 1.75 pints of Helena OUTLAW™ per acre for control of annual weeds, or 1.75 - 6 pints of Helena OUTLAW™ per acre for control of biennial and perennial weeds

Aim™	Fallowmaster®	Paramount®
Ally [®]	Fallow Star [™]	Sencor [®]
Amber®	Finesse [®]	Tordon [™] 22K
Atrazine	Glyphosate (Gly Star™ Plus)	Touchdown [®]
Curtail [™]	Gramoxone® Extra	2,4-D
Cyclone [®]	Kerb [™]	
Distinct®	Landmaster® BW	

BETWEEN CROP APPLICATION RESTRICTIONS:

- Do not apply more than 6 pints per acre per application.
- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- Plant only labeled crops within 29 days following application.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

Filename: HELENA OUTLAW (5905-574) Label Rewrite 021914 CLN

FOREST MANAGEMENT

Do not apply under drip line of desirable trees or adjacent to-desirable vegetation:

Forest Site Preparation

Budbreak Spray:

For control of alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest, seedlings, apply up to 6 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as an oil, spray (see "Mixing Instructions") after alder buds break, but before foliage is 1/4 full size. A water spray including 2 to 4 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate may also be used.

Foliage Spray:

To control alder and susceptible woody plants before planting forest seedlings, apply up to 6 pints per acre in a minimum of 10 gallons spray mixture per acre. If desired, apply as a water spray including up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). For best results, apply after alder foliage has reached full size.

Conifer Release:

Some Conifers are more susceptible to Helena OUTLAWTM than others. Prior to application, consult your local Forestry agency about use pattern and history of use. To control alder, susceptible broadleaf weeds, and susceptible woody plants in young conifer stands, apply up to 3.25 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray when 3/4 of the brush foliage has full size leaves and before new conifer growth reaches 2 inches in length. Such stages usually occur between early May and mid-June, but application timing should be based on growth stages of brush and conifers. Application may cause leader deformation and other conifer injury, but trees should overcome it during the next growing season.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply up to 5 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray including, if desired, up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). Make application before new growth on Douglas fir is 2 inches long. To release ponderosa pine from the same species, treat before new pine growth begins in the spring. Addition of oil or oil concentrate may cause unacceptable injury to pines. For dormant applications in late winter or early spring for control of susceptible woody species such as alder, willow, poplars, cherry, vine maple, ceanothus, tanoak, madrone, and manzanita, apply up to 5 pints per acre in a minimum of 10 gallons spray mixture per acre. This dormant treatment should be applied in diesel oil, fuel oil, stove oil, or other suitable diluent such as water plus crop oil concentrate (see "Mixing Instructions"). Do not use in plantations where pine and larch are among the desired crop species.

To control hazel brush in the Lake states, apply up to 3.25 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray when new shoot growth of hazel is complete (usually mid-July).

After conifer species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir crease growth and harden off and brush is still actively growing in late summer, apply up to 4.75 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray to control certain competing hardwoods such as alder, aspen, birch, hazel and willow. However, if possible injury cannot be tolerated, do not use since this treatment may cause conifer injury.

Forest Roadsides:

To control susceptible broadleaf weeds and woody plants on forest roadsides, apply 1.75 to 5 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray and, if desired, include up to 3 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate (see "Mixing Instructions"). Apply when sufficient foliage is present for absorption.

FORESTRY USE RESTRICTIONS:

- Do not apply more than 6 pints per acre per application.
- Do not make more than 1 broadcast application per year.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year for broadcast application.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

ROADSIDES; MEDIANS; HIGHWAY, RAILROAD, UTILITY AND PIPELINE RIGHTS-OF-WAY; VACANT LOTS; AROUND UTILITY INSTALLATIONS, TRANSFORMERS, PUMP HOUSES, AND BUILDINGS; STORAGE AREAS; FENCES; GUARDRAILS; LUMBER YARDS; INDUSTRIAL SITES; AIRPORTS; TANK FARMS; FARMSTEADS; AND SIMILAR NONCROP AREAS

Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

For control of many annual and perennial broadleaf weeds and small woody plants, apply 1 to 4 pints per acre. Use the high rate for woody plants. For larger woody plants listed in Table 7 apply 2 – 8 pints per acre. Applications may be as broadcast sprays, small area sprays or spot treatments. For small areas or spot spraying, use 3 fluid ounces per gallon of water and spray weeds to runoff. Regardless of the method of application, use adequate spray volume for full coverage of weeds. Preferred application timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds are too mature. Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost.

For fall treatment of mature weeds or perennial weed regrowth, use up to 2 pints per acre. Several seasons of spring plus fall treatments may be necessary to control certain perennials. Use of oil sprays or the addition of spray adjuvants improves weed control, but also increases the risk of damage to desirable ground covers.

Plant Response: Bent grass, other warm season or southern grasses, alfalfa, clover, or other legumes may be killed or injured. Do not apply when grass is in boot to milk stage, or after heading begins, if grass production is desired. Do not apply to newly seeded areas until grass is well established.

Reseeding is not allowed for at least 30 days following application. NON-CROPLAND RESTRICTIONS:

- Postemergence (annual & perennial weeds):
 - Do not make more than 2 applications per year.
 - Do not apply more than 4 pints per acre per application.
 - Minimum spray interval between applications is 30 days.
- Postemergence (woody plants):
 - Do not make more than 1 application per year.
 - Do not apply more than 8 pints per acre per application.
- Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

CONSERVATION RESERVE PROGRAMS

Helena OUTLAW™ is recommended for use for Conservation Reserve Programs, igeneral farmstead (non-cropland only), weed and brush control, or use in State Recognized Noxious Weed areas (non-cropland areas).

Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species, Some weed species will require tank mixes for adequate control.

CONSERVATION RESERVE PROGRAMS RESTRICTIONS:

- Do not apply more than 5 pints per acre per application.
- Rates above 5 pints of Helena Outlaw per acre are for spot treatments only
- For spot treatment do not apply more than 7-1/3 pints per acre per application
- Maximum of 10 pints per acre per year for broadcast treatments
- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- For woody plants, do not exceed one treatment per year.
- If grass is to be cut for hay, Agricultural Use requirements for the Worker Protection Standard are applicable.

Consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

GENERAL FARMSTEAD

Farmstead and Fence-row Treatment Application Instructions

Helena OUTLAW™ may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in Tables 1 and 2, these treatments may be used to control or suppress woody plant species listed in Table 7.

Table 7.

The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments:

Alder	Kudzu
Ash .	Locust, Black
Aspen	Maple
Basswood	Mesquite
Beech	Oak
Blackberry	Oak, Poison
Blackgum	Olive, Russian
Cedar	Persimmon, Eastern
Cherry	Pine
Chinquapin	Plum, Sand (Wild Plum)
Filename: OUTLAW (5905-574) Label Rewrite 041113 CLN	• • •

23/

Cottonwood Creosotebush Dewberry Dogwood Elm

Grape Greenbriar

Hawthorn (Thornapple)

Hemlock
Hickory
Honeylocust
Honeysuckle
Hornbeam
Huckleberry
Huisache
Ivy, Poison

Poplar Rabbitbrush Redcedar, Eastern Rose, McCartney Rose, Multiflora Sagebrush, Fringe

Sassafras Spruce Sumac Sweetgum Sycamore Tarbrush Willow Witchhazel Yaupon Yucca

To prepare soil and water emulsions, mix in the order and proportions indicated below.

The solution should remain milky colored without an oily layer on top when under agitation. If an oily layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

Do not exceed 40 gallons of spray solution per treated acre per application. One gallon of Helena OUTLAW $^{\text{TM}}$ in forty gallons of spray solution contains 1.09 pounds acid equivalent of dicamba and 1.45 pounds acid equivalent of 2,4-D. Spray plants to wet. Do not allow this spray mix to contact desirable vegetation.

To control brush, briars, and weeds along fence-rows surrounding pasture and ranch lands, and fallow fields, use a tank mix of 2.5% Helena $OUTLAW^{TM}$, 87.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank mix will damage or kill desirable grasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

- 1) Water: Begin by agitating a thoroughly clean sprayer tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2) Emulsifier: Add 0.5% volume to volume of water.
- 3) Helena OUTLAW™: add 2.5 gallons per 100 gallons of total intended solution.
- 4) Diesel Oil: Add 10 gallons per 100 gallons of total intended solution.

Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

FOR SPRAYING FOLIAR APPLICATIONS:

- 1) Spray when leaves have reached full size but have not hardened due to drought or maturity.
- 2) Spray individual plants to wet with handgun.
- 3) For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
- 4) Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FOR DORMANT BASAL APPLICATIONS:

- 1. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
- 2. Spray in late winter and early spring before plants break dormancy.
- 3. Spray the bottom 24" of the target stem to wet on all sides.

- 4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
- 5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FARMSTEAD AND FENCEROW RESTRICTIONS:

- Postemergence (annual & perennial weeds):
 - Do not make more than 2 applications per year.
 - Do not apply more than 5 ½ pints per acre per application.
 - Minimum spray interval between applications is 30, days.
- Postemergence (woody plants):
 - Do not make more than 1 application per year.
 - Do not apply more than 11 pints per acre per application.

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

Helena Outlaw contains 0.18 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Helena Outlaw contains 0.136 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

FOR CUT SURFACE TREATMENTS:

Apply Helena OUTLAW™ in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- Frill or Girdle Treatments: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with Helena OUTLAW™.
- Stump Treatments: Spray or paint freshly cut surface with Helena OUTLAW™. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

CUT SURFACE RESTRICTIONS:

- Do not make more than one cut surface application per year.
- Do not use more than 22 pints per 100 gallons of spray solution.

Weeds listed in this label:

Common Name	Scientific Name
ANNUALS	
Beebalm, Spotted	Monarda punctata
Broomweed, Common	Gutierezia dracunculoides
Buckwheat, Wild	Polygonum convulvulus
Buffalobur	Solanum rostratum
Burdock	Arctium spp.
Buttercup, Corn	Rannculus arvensis
Chickweed, Common	Stellaria media
Cockle, Corn	Agrostemma githago
Cocklebur, Common	Xanthium strumarium
Coreopsis, Plains	Coreopsis tinctoria
Croton, Woolly	Croton capitatus
Devilsclaw,	proboscidea luisianica
Dogfennel (Cypressweed)	Eupatorium capillifolium
Eveningprimrose, Cutleaf	Oenothera lacinata

Common Name	Scientific Name
Flax	Linum catharticum
Fleabane, Annual	Erigeron annuus
Flixweed	Descurainia sophia
Henbit	Lamium amplexicaule
Horseweed/Marestail	Conyza canadensis
Knotweed, Prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Lambsquarters, Common	Chenopodium album
Lettuce, Prickly	Lactuca serriola
Mallow, Common	Maalva neglecta
Mornigglory, Ivyleaf	Ipomea hederacea
Tall	Ipomea purupurea
Mustard, Annual	Brassica spp.
Tansy	Descurainia pinnata
Pennycress, Field	Thlaspi arvense
Pepperweed, Virginia	Lepidium virginicum
Pigweed, Prostrate,	Amaranthus blitoides
Redroot,	Amaranthus retroflexus
Smooth,	Amaranthus hybridus
Tumble	Amaranthus albus
Poorjoe	Diodia teres
Purslane, Common	Portulaca oleracea
Ragweed, Common,	Ambrosia ariemisiifolia
Lance-leaf,	Ambrosia bidentata
Western	Ambrosia psilostachya
Sedge	Cyperus compressus
Shepherdspurse	Capsella bursa-pastoris
Smartweed, Pennsylvania	Polygonum pensylvanicum
Sneezeweed, Bitter	Helenium amurum
Sunflower, Common (wild)	Helianthus annuus
Thistle, Russian	Salsola iberica

Common Name	Scientific Name
BIENNALS AND PERENNIALS	
Bindweed, field	Convolvulus arvensis
Bittercress	Cardamine spp.
Buckeye	Aesculus spp.
Bullnettle	Cnidosculus stimulosus
Chicory	Cichorium intybus
Clover, Hop	Trifoleum aureum
Dandelion	Taraxacum officinale
Dock, Curly	Rumex crispus
Elderberry	Sambucus canadensis
Goldenrod, Missouri	Solidago missouriensis
Goldenweed, Common	Isocp,a cprpmopifolia
Groundset	Senecio vulgaris
Honeysuckle, Hairy	Lonicera
Horsenettle	Solanum caroliniense
Ivy, Poison	Rhus radicans
Knapweed, Black	Centaurea nigra
Russian	Centaurea repens
Spotted	Centaurea maculosus
Marshelder	Ina annua
Mesquite	Prosopis juliflora

Common Name	Scientific Name
Milkweed, Antelopehorn	Asciepius
Nightshade, Silverleaf	Solanum elaeagnifolium
Black	Solanum nigrum
Persimmon, Eastern	Diospyros virginiana
Rabbitbrush	Chrysanthemus pulchellus
Ragwort, Tansy	Senecio jacobia
Redvine '	Brunnichia ovata
Sagebrush, Fringed	Artemisia frigida
Smartweed, Swamp	Polygonum coccineum
Sorrel, Red (Sheep Sorrel)	Rumex acetosella
Sowthistle, Perennial	Sonchus arvensis
Spurge, Leafy	Euphorbia esula
Starthistle, Yellow	Centauria solstitialis
Tallow Tree, Chinese	Sapium sebiferum
Thistle, Bull	Cirsium vulgare
Canada	Cirsium arvense
Musk	Carduus nutans
Plumeless	Carduus acanthoides
Vetch	Vicia spp.
Yankeeweed	Eupatorium compositifolium

FOOD/FEED CROP USES

This product can be used on the following:
Conservation Reserve Program Land*
Fallow Systems (Between Crop Application)*
General Farmstead*
Grain Sorghum
Grass (Hay or Silage)
Pastures
Rangeland
Wheat

Look inside for complete Restrictions and Limitations and Application Instructions

*These crops are considered Food/Feed crops only when harvested, grazed, or foraged. Otherwise, they are considered non-Food/Feed uses.

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions or presence of other materials. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

HELENA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELENA MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES

RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WHEN Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL HELENA OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. HELENA and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of HELENA. No employee or agent of HELENA or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

Ally®, Canvas®, Express®, Finesse®, Glean®, Harmony®, Karmex®, and Sinbar® are registered thademarks of E. I. du Pont de Nemours & Company.

Banvel®, Clarity®, Distinct®, Fallowmaster®, and Paramount® are registered trademarks of BASF Corporation.

Basagran® and Laddok® S-12 are registered trademarks of BASF AG.

Asulox®, Bronate®, Butril®, Dakota®, Tiller® are registered trademarks of Bayer CropScience.

Amber®, Evik®, Cyclone®, Sencor®, Gramoxone®, Peak®, Rave™ and Touchdown® are trademarks and/or registered trademarks of Syngenta Crop Protection.

Landmaster®, Permit® and Roundup® Ultra are registered trademarks of Monsanto Company.

Curtail™, Stinger™, Grazon™, Kerb™ and Tordon™ are trademarks of Dow AgroSciences LLC.

Aim™ is a trademark of FMC Corporation.

Fallow Star™ and Gly Star™ Plus are trademarks of Albaugh, Inc.